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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,669	01/03/2002	Mark T. Feuerstracter	42390P11856	8280

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EXAMINER	
NGUYEN, STEVEN H D	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
06/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/037,669	FEUERSTRAETER ET AL.	
	Examiner	Art Unit	
	Steven H.D Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,21-27 and 31-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13, 21-27 and 31-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-13, 21-27 and 31-36 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As claims 1, 21, 36, the recitation "if the content in the buffer has reached or exceeded a predetermined threshold, identifying a flow control priority level that is oversubscribed based on monitoring one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic". The specification does not disclose monitoring at least one of COS, TOS, QOS and time sensitivity of the traffic.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 31-36 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claims which are directed a computer readable medium having computer program, which when executed, causes a computer to perform something, do not includes encode with a computer program, software, a computer executable instruction or storing, embodied with, encoded with, having stored or having an encoded computer program which is executed by a computer to perform the steps. Therefore, the claims can read as a carrier

wave or punch card or paper, a none executable file that having the computer program that has a set of instructions which is received and executed by a machine or computer.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-13, 21-27 and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (USP 6957269) in view of Lee (USP 6859435).

Williams discloses a method and network interface comprising identifying a receive capability associated with one or more priority levels of Ethernet traffic for a network device (Col. 4, lines 43-55 includes queues for storing the frames, each queue corresponds to a priority of the frame, See Col. 5, lines 29-46, identifying which priority queue has capability to receive packets and which priority queue do not have capability to receive packet; then generate a control message "pause frame", includes a priority indicator which indicates all the other priorities buffer is still have capability to receive packets, for transmitting to the sender interface which suspends the transmission of packets having the same priority indicator, See col. 7, lines 49-58, col. 8, lines 13-36, See col. 9, lines 3-47 and col. 11, lines 1-22); determine a flow control priority level based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic, wherein the flow control priority level denotes an identified priority level above and/or below which the network device is able to receive Ethernet

traffic (See col. 5, lines 29-41, col. 6, lines 17-24, Col. 8, lines 23-36 and col. 10, lines 12-38); transmitting the generated control message to a communicatively coupled network device, whereupon receipt of the generated control message the communicatively coupled network device acts in accordance with the received control message to suspend a subset of Ethernet traffic (Fig 5, ref 570); the buffer for each priority level is comprised of one or more memory device(s) (Col. 5, lines 29-46); generating a control message comprises generating an Ethernet control packet including a priority field, the priority field denoting the flow control priority level (Fig 4); the priority field is included in a header portion of the Ethernet control packet; receiving Ethernet traffic; identifying a priority level associated with each packet of received Ethernet traffic; and forwarding each received packet to a receive buffer based, at least in part, on the identified priority level associated with the Ethernet packet (Col. 5, lines 29-46); monitoring the receive capability of buffers associated with each of the priority levels of Ethernet traffic (Col. 7, lines 49-58); throttling transmission of a subset of Ethernet traffic comprises temporarily suspending transmission of the subset of Ethernet traffic for a set period of time (Col. 7, lines 25-58); receiving content from a host network device for transmission to another network device communicatively coupled through an Ethernet network; and assigning a priority level to the received content based, at least in part, on a source of such Content (inherently discloses by station for generating a frame with priority); receiving content from one or more source applications executing on a host network device, the content tagged with a priority level associated with its source application; and selectively transmitting received content to another network device communicatively coupled through an Ethernet network based, at least in part, on the priority level of the content (inherently discloses) and received control message(s) throttling

transmission of a subset of such Ethernet traffic (Fig 5, ref 570); a transmit buffer, responsive to a host network device and the control logic, to receive content from one or more application(s) executing on the host network device for transmission to other network device(s) through an Ethernet network, the received content including an indication of priority level (Inherently discloses); the indication of priority level in the received content is determined by its source application (Inherently discloses); the control logic is a media access controller (MAC) including enhanced flow control capability to implement flow control on a mere subset of Ethernet traffic (See col. 1, lines 23-40). However, Williams fails to disclose scanning the buffers in order to determine the content buffers have reaching or exceeded a threshold in order to identify which priority is congested; generating a control message including a flow control priority level, the flow control priority level denoting the identified priority level above or below which the network device has the ability to receive Ethernet traffic. In the same field of endeavor, Lee discloses a method and device for scanning the buffers in order to determine the content buffers have reaching or exceeded a threshold in order to identify which priority is congested (Fig 7, col. 11, lines 20 to col. 12, line 2); generating a control message including a flow control priority level which denotes the flow control priority level above and/or below which the network device has the ability to receive Ethernet traffic (Col 5, lines 62 to col. 6, lines 25, identifying the priority levels that the node still has a capability to receive more packets and generating a feedback message includes an priority level that the node has room to receive the packets has a priority greater or less than the priority level in the feedback message; See col. 10, lines 44-62, col. 11, lines 44-67, col. 12, lines 43-64 and Figs 9-10) wherein flow control priority level based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity

of the Ethernet traffic (Col. 1, lines 25-35, lines 34-36; col. 7, line 9, service priorities and col. 15, lines 63-66); determining available buffer capacity for each of a plurality of buffers associated with a commensurate plurality of Ethernet priority levels (Fig 10, Ref 1007 for determining available buffers); the available buffer capacity associated with a particular Ethernet priority level denotes the ability of the buffer to receive additional Ethernet traffic of that priority level (Fig 10, Ref 1007 for determining available buffers for receiving the packets); the buffers associated with each of the priority levels are virtual buffers implemented within a common physical buffer (col. 11, lines 8-20); the generated control message, being Ethernet pause frame having a priority field which uses to implement flow control after identifying the priority level, includes an indication of the priority level above which a receive buffer has available capacity to receive Ethernet traffic of an associated priority level (Col. 5, lines 62 to col. 6, Lines 25); a receiving network device initiates a pause in transmission of Ethernet traffic having a priority level below that indicated in the received control message (Col. 5, lines 62 to col. 6, Lines 25); another control message is received denoting that transmission of the subset of Ethernet traffic may resume (Col. 6, lines 9-25).

Since, Lee suggests a method and system for generating a feedback message includes a priority level for indicating the receiver still has room for the packet with a priority greater or low the priority level for transmitting to the sender can be implement in the Ethernet network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply the teaching of Lee into the teaching of Williams. The motivation would have been to prevent of deadlocks and live-locks in lossless back-pressured packet network.

Conclusion

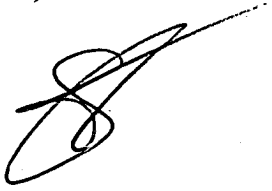
6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H.D Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Welling Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Steven H.D Nguyen
Primary Examiner
Art Unit 2616